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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/066,176

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EXAMINER

DURAN, ARTHUR D

ART UNIT

PAPER NUMBER

3622

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/066,176	<b>Applicant(s)</b> ROWE ET AL.	
	<b>Examiner</b> Arthur Duran	<b>Art Unit</b> 3622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-27 have been examined.

#### ***Response to Amendment***

The Amendment filed on is insufficient to overcome the prior rejection.

#### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/22/2008 has been entered.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**1. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

**Dandurand ("Market Niche Analysis In the Casino Gaming Industry", Journal of Gambling Studies, Vol. 6(1), Spring 1990) in view of Sheppard (US 6,026,397).**

2. Regarding claims 1, 18, 21, 24, and 27, Dandurand teaches of analyzing casino customers and segmenting them into groups and sub-groups. (Page 78). Dandurand gives an example where by customers are first grouped based on their "Slot Gaming Budget." (Page 82, Table 1).

Art Unit: 3622

Then, players with a budget greater than \$500 are further sub-divided based on other attributes. (Page 83, Table 2). After a target player is identified, offers and benefits are conferred to those who fall within that segmentation. (Page 84). Dandurand teaches that the data is taken from a database (i.e. queried). (Page 81).

Regarding claim 1, 14-15, 18, 21, 24, and 27, Dandurand does not explicitly teach that this method is accomplished using a computer, however, Dandurand teaches of Management Information Systems (MIS) functions of the enterprise. (Page 84). MIS is a computer system designed to help managers plan and direct business and organizational operations. (Dictionary.com).

3. Regarding claims 14-15, 18, 21 and 24, Dandurand does not explicitly teach that this method is accomplished using a computer, however, Dandurand teaches of Management Information Systems (MIS) functions of the enterprise. (Page 84). MIS is a computer system designed to help managers plan and direct business and organizational operations. (Dictionary.com). An automatic means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art. *In re Venner*, 262 F.2d 91, 95, 120 USPQ 193, 194 (CCPA 1958). Additionally, applicant teaches that it is already common for data to be collected and searched in “database queries”. (Specification, Page 2). *See* MPEP § 2144.04.

4. Alternatively, Sheppard teaches of a method for using a computer to segment databases into groups and sub-groups. (Abstract).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used a computer to automate the data analysis that Dandurand teaches. One

would have been motivated to do so in order to save time and to take advantage of the computing power of a computer.

Additionally, Dandurand teaches of analyzing database information in order to segment various customers in a casino. (Page 81). The database contains information relating to the customers preferences and gaming behavior. (Page 81-82). Based on the customer's preferences (as well as other variables), customers are segmented into groups and sub-groups. (Fig. 1; Page 78). These groups and sub-groups allow for the determination of target market customers and the creation of targeted marketing programs. (Pages 80-81). Dandurand gives an example of this iterative segmentation in use. First customers are segmented based on their "slot gaming budget." (Table 1; Pages 81-82). Thereafter, customers are further segmented based on various other factors, such as gender, age, race, etc. (Table 2; Pages 83-84). After a target player is identified, offers and benefits are conferred to those who fall within that segmentation. (Page 84). Therefore, Dandurand gives an example of an iterative method of obtaining customer data from a database, segmenting customers based on various variables, and providing offers and benefits to those customers that are identified.

Additionally, Dandurand discloses a variety of attributes that can be analyzed for targeting (page 83 table 2) and that particular attributes (zip code) can be further analyzed and that different clusters can be arrived at and that filtering can be performed based on combination of additional variables.

Dandurand does not explicitly disclose that single variables are analyzed for different cluster determining.

However, Sheppard discloses that numerous clusters for targeting can be determined (Figures 9a, 9b) and that cluster refinement can be performed in an iterative process with further cluster analysis and filtering (Figure 8) and that different variables can be analyzed at different levels of refinement and association with similar or dissimilar neighboring clusters (Figure 9b). And, Sheppard discloses that clusters can be analyzed and assessed based on anywhere from a single variable to all variables or anywhere between (Figures 12, 13). Notice in Figure 12 that a cluster can be defined for 4 of the 97 possible parameters. And, notice in Figure 12 that anywhere from 1 to 97 of the possible variables can be utilized for targeting, cluster analysis, and cluster determining. Hence, Sheppard discloses advanced cluster, group, and subgroup determining for targeting purposes. And, notice that Sheppard discloses that the cluster analysis can be iterative and continual to find numerous possible target groups and subgroups.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add Sheppard's further targeting variable analysis to Dandurand's targeting variable analysis. One would have been motivated to do this in order to better determine target groups and better target users.

Also, Sheppard discloses that different promotions may be presented to the different target groups (col 2, lines 21-20; col 2, lines 44-52).

5. Regarding claim 2, in the example given by Dandurand, the customers are sorted based on their "slot gaming budget." Those who have a budget greater than \$500 are placed in the group "premium" which is then further segmented.

6. Regarding claim 3, applicant teaches that the "query" attribute that is used to create the "first subset" is part of the "selected attributes." The query attribute in claim 2 is used to create a

“first subset” whereby all individuals in this group have at least the “query attribute.” However, applicant states in claim 1 that the “selected attributes” are compared in order to determine a “difference” between individuals. It is unclear to the examiner how it would be possible to have a query attribute that is used to find similar individuals also be in the group of attributes that is used to find “difference[s]” between individuals.

7. Regarding claim 4, Dandurand’s first sorts the data based on “Slot Gaming Budget.” (Page 82). Dandurand then compares the individuals in a specific category based on other attributes, none being “Slot Gaming Budget.” (Page 83).

8. Regarding claim 5, applicant teaches of defining a “gaming DNA”. Applicant teaches that a “gaming DNA” for an individual is “any subset of the attributes stored in the system’s player tracking database.” (Specification, Page 14). Dandurand teaches creating user profiles with selected variables. (Page 82)

9. Regarding claims 6-8, applicant teaches that the attributes of the “gaming DNA” can be equal to, more than or less than the “selected attributes.” Applicant teaches that the DNA may “vary from analysis to analysis.” (Specification, Page 14). The DNA may be “redefined each time the player tracking database is mined.” (Id.). Dandurand does not explicitly teach every possibility, however, Dandurand teaches that the profile is composed of selected variables. (Page 82) Dandurand further teaches that the profile could be expanded into a “richer profile” with more variables or could be reduced to focus on a niche. (Page 83, 84).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have created the user profile with any number of user attributes. One would have been motivated to do so in order to expand or reduce the “niche” market.

Art Unit: 3622

10. Regarding claim 9, Dandurand teaches of a target market strategy on the segmented groups. (Page 74).

11. Regarding claim 10, applicant teaches that the marketing strategy comprises “identifying at least one single relational polymorphism” between the subsets. Applicant teaches that a “single relational polymorphism” is an attribute which is different for a subset of individuals. (Specification, Page 17). Dandurand teaches of a similar method whereby the marketing strategy is focused on specific sub-groups, or “niche markets.” (Page 83). These “sub-groups” share the same parent group; in this case, budgets greater than \$500.

12. Regarding claim 11 and 13, Dandurand teaches of similar attributes. (Page 83, Table 2).

13. Regarding claim 12, and 17, Dandurand teaches a similar method of using “Las Vegas Visitor Profile” as the database that consists of players gambling in Las Vegas. (Page 82).

14. Regarding claim 16, 17, 19, 20, 22, 23, 25, and 26, Dandurand teaches of similar tracking data, such as average bet at electronic slots. (Page 83)

### ***Response to Arguments***

15. Applicant's arguments filed 1/22/2008 have been fully considered but they are moot in grounds of the rejection above. Please note the additional citations to Dandurand and, particularly, Sheppard in the rejection of the independent claims above.

Examiner further notes that it is the Applicant's claims as stated in the Applicant's claims that are being rejected with the prior art. Also, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). And, Examiner notes that claims are



given their broadest reasonable construction. See *In re Hyatt*, 211 F.3d 1367, 54 USPQ2d 1664 (Fed. Cir. 2000).

Examiner notes that while specific references were made to the prior art, it is actually also the prior art in its entirety and the combination of the prior art in its entirety that is being referred to. Also, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under §103.

If a person of ordinary skill in the art can implement a predictable variation, and would see the benefit of doing so, §103 likely bars its patentability. Moreover, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond that person's skill. *KSR Int'l Co. v. Teleflex, Inc.*, No 04-1350 (U.S. Apr. 30, 2007).

Also, KSR states that it is obvious to recite combination which only unite old elements with no change in their respective functions and which yield predictable results. *KSR*, 127 S.Ct. at 1741, 82 USPQ2d at 1396.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arthur Duran whose telephone number is (571)272-6718. The examiner can normally be reached on Mon- Fri, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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3/17/2008